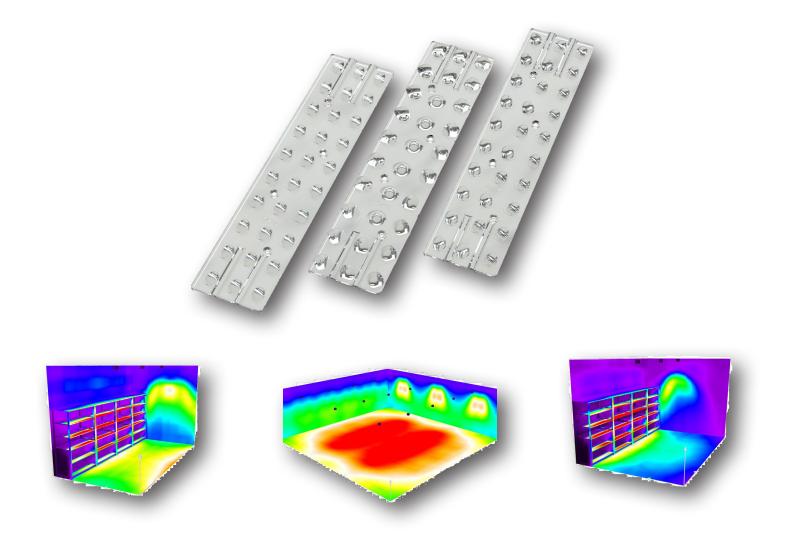


TECHNICAL DEPT. Lenses Test Report

Stock&Shop For Mid-Power LEDs and Power LEDs.



Optical panels made of 30 optics, designed for most popular Mid-Power & Power LEDs. Excellent optical solution for lighting systems used in rooms with high ceilings and industrial framing. Perfectly meet the requirements for applications that need high-efficiency lighting while being energy efficient. Deliver the exclusive opportunity to be used in existing light fixtures using conventional lenses. Available in 3 beam angles, provide uniform light distribution. The double asymmetrical beam fits perfectly into environments with shelving on both sides of the aisles: performs uniform double sided beam while avoiding the glare effect in the middle of the aisle.

Features:

- Optic Type: rectangular panels made of 30 PMMA lenses
- Beam angles: Symmetric, Asymmetric, Double Asymmetric.
- Lighting efficiency over 85%.
- On request, available with PCB for testing.

Any application in Wide Area Lighting: Industrial Areas, Warehouses, Retail Shops, Malls, Outlets, Supermarkets, Showrooms, Covered Parking, etc.

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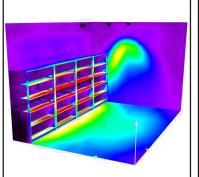
technical@khatod.com

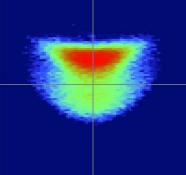


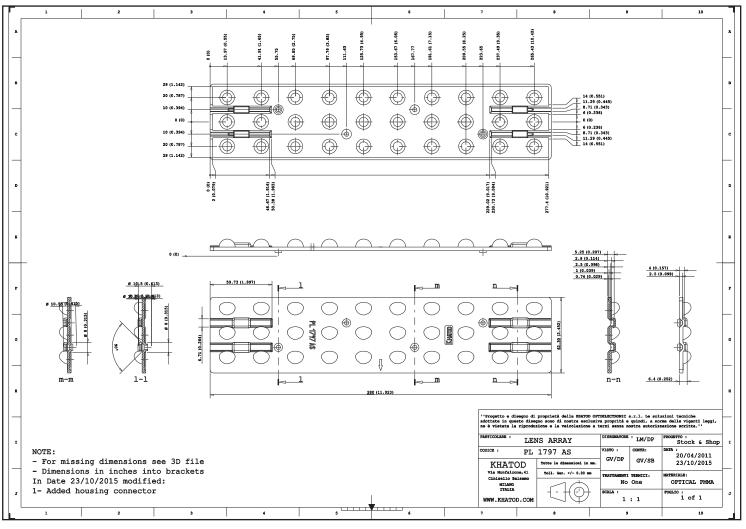
2. PL1797AS



- Lenses Material = PMMA
- Peak Intensity: 30°
- Full angle at 50% : ~ $17^{\circ}x108^{\circ}$
- Full angle at 10% : ~ $80^{\circ}x120^{\circ}$
- The light spots here represented refer to tests carried out with Mid-Power LEDs @ 50lm, ~ 1.2mm high







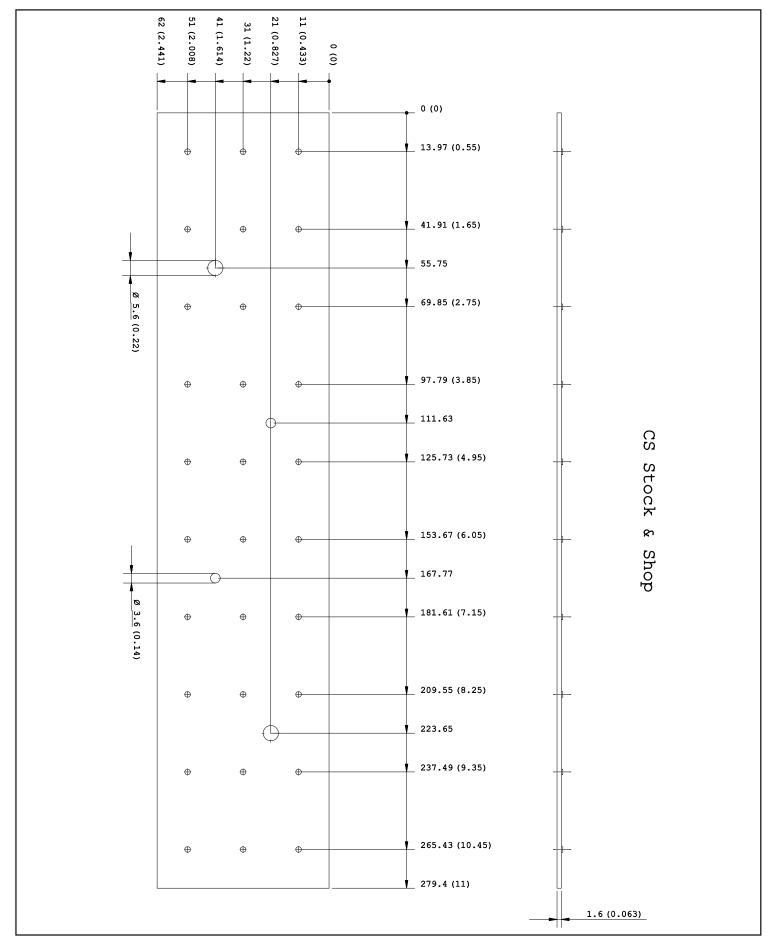
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4. PCB Drawing



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5. Materials

Material	Тор	Tstg
PMMA	-40°85°C	-40°85°C

Notes:

- Intensity (I) and illuminance (E) data are normalized to 1000 lm
- The optical values shown are the result of optical simulations carried out with ASAP and ZEMAX software systems. The optical simulations are carried out on the basis of the typical values provided in the LED manufacturers' official datasheets. The photometric analysis has been carried out on physical samples. On request, by supplying your PCB, we can provide the measurement photometric file. General Optical Measurement Tolerance : $\pm 10\%$

Use and Maintenance

- DO NOT HANDLE OR INSTALL LENSES WITHOUT WEARING GLOVES, SKIN OILS MAY DAMAGE LENS OR LIGHT TRANSMISSION;
- CLEAN LENSES WITH MILD SOAP AND WATER AND A SOFT CLOTH;
- DO NOT USE ANY COMMERCIAL CLEANING SOLVENTS ON LENSES.

Disclaimer

Please note that flow lines and weld lines on the external surfaces of the lenses are acceptable if the optical performance of the lens is within the specifications.

Should you require further information, please contact Khatod for advice. All lens testing must be subject to identical conditions as per Khatod test condition. Khatod Optoelectronic, Milan, Italy, manufactures lenses for LEDs. Any other use of the lens shall void our liability and warranty. The lenses are an inert component to be used in the manufacture of various products. Our warranty and liability are limited only to the manufacture of the lens. You may not modify, copy, distribute reproduce, license or alter the lens and related materials of Khatod. Khatod does not warrant against damages or defects arising out of the use or misuse of the products; against defects or damage arising from improper installation, or against defects in the product or in its components. No warranty of any kind, expressed or implied, is made regarding the safety of the products. The entire risk as to the quality or performance of the product is with the buyer. In no event shall Khatod be liable for any direct, indirect, punitive, incidental, special, consequential damages, or any damages whatsoever arising out of or connected with the use or misuse of the product. Khatod shall not have any obligation with respect to the product or any part thereof, whether based on contract, tort, strict liability or otherwise. Buyer assumes all risks and liability from use of the product. The laws of Milan, Italy govern this product warranty and liability and you hereby consent to the exclusive jurisdiction and venue of courts in Milan, Italy in all disputes arising out of or relating to the use of this product. Production, marketing, distribution, sale of these products as well as their possible modifications and variations are only exclusive right of Khatod Optoelectronic. No company can perform any of these actions without written permission released by Khatod Optoelectronic. The information contained in this document is proprietary of Khatod Optoelectronic and may change without notice.

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